



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,574	12/28/2000	Lavelle Freeman	ABHS-0151/B000240	6677
23377	7590	09/29/2004	EXAMINER	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE, 46TH FLOOR 1650 MARKET STREET PHILADELPHIA, PA 19103			ORTIZ RODRIGUEZ, CARLOS R	
			ART UNIT	PAPER NUMBER
			2125	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/750,574

Applicant(s)

FREEMAN ET AL.

Examiner

Carlos Ortiz-Rodriguez

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/23/01 and 1/8/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 rejected under 35 U.S.C. 112, second paragraph.

Claim 7 recites the limitation "the multi-level nodal hierarchy". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 9-12, and 16-20 rejected under 35 U.S.C. 102(b) as being anticipated by Atanackovic et al. "The application of multi-criteria analysis to substation design", pages 1172-1178, 1997 IEEE.

Regarding claims 1-4, 9-12, 16-17 and 18-20 Atanackovic et al. in the publication titled, "The application of multi-criteria analysis to substation design", discloses a computer-

Art Unit: 2125

implemented method for designing an electrical substation (Abstract), comprising: identifying functional requirements for said electrical substation (voltage levels, insulation levels, etc.); selecting components for said electrical substation from a store of said components as a function of said functional requirements (P4 C2); and generating at least one substation design (Section 3.2 "Selection of Substation Electrical Equipment"), said substation design meeting said identified functional requirements for said electrical substation (Conclusion L1-5); and receiving data concerning weighted preferences regarding aspects of said substation (Section 4.3); ranking said substation design as a function of said preferences (Section 3); the electrical substation comprises one of a power substation and a switching substation (Section 3.1); and outputting a list of system components making up a substation design and their attributes (Table 3). Outputting a blueprint of a substation design is inherent to Atanackovic et al.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 13-14, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atanackovic et al. "The application of multi-criteria analysis to substation design", pages 1172-1178, 1997 IEEE in combination with Nick U.S. Patent No. 6,009,406.

Regarding claims 5, 13-14, and 22 Atanackovic et al. "The application of multi-criteria analysis to substation design", discloses all the limitations of the base claims, as stated above. But, in said publication Atanackovic et al. do not clearly specify details regarding presenting a series of questions.

However, Nick discloses identifying functional requirements for said electrical substation further comprises: presenting a series of questions; and accepting responses to said questions; wherein subsequent questions are presented as a function of responses to previous questions (C2 L7-43).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Atanackovic et al. "The application of multi-criteria analysis to substation design", and combining it with the invention disclosed by Nick. The results of this combination would lead to functional requirement-based knowledge-engineered process for substation design.

One of ordinary skill in the art would have been motivated to do this modification because it is known in the art to present a series of questions; and accepting responses to said questions; wherein subsequent questions are presented as a function of responses to previous questions in order to satisfy individual orders as disclosed by Nick.

Art Unit: 2125

5. Claims 6-8, 15, 21 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atanackovic et al. "The application of multi-criteria analysis to substation design", pages 1172-1178, 1997 IEEE in combination with Atanackovic et al. "An integrated knowledge-based model for power-system planning", pages 65-71, 1997 IEEE.

Regarding claims 6, 7, 15, 21 and 23-25 Atanackovic et al. "The application of multi-criteria analysis to substation design", discloses all the limitations of the base claims, as stated above. But, in said publication Atanackovic et al. do not clearly specify details regarding hierarchical nodes.

However, Atanackovic et al. "An integrated knowledge-based model for power-system planning", discloses the computer-implemented method wherein said generating at least one substation design comprises using a knowledge-based system that includes a user modifiable artificial intelligence based representation of a decision tree defined by hierarchical nodes; and a database that can be dynamically updated with additional designs and substation components and component attributes (P66 C1 and P70 C1 and FIG 2-3).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Atanackovic et al. "The application of multi-criteria analysis to substation design", and combining it with the invention disclosed by Atanackovic et al. "An integrated knowledge-based model for power-system planning".

One of ordinary skill in the art would have been motivated to do this modification in because databases that can be dynamically updated and knowledge-based systems are frequently utilized in the art to minimize conflicting situations as suggested by, Atanackovic et al. in "An

Art Unit: 2125

integrated knowledge-based model for power-system planning”.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to functional requirement-based knowledge-engineered process for substation design:

- a. U.S. Pat. No. 5,604,892 to Nuttall et al., which discloses method for modeling a physical system of elements using a relational database.

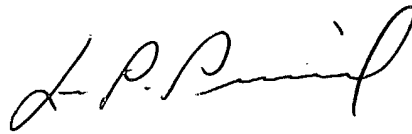
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Ortiz-Rodriguez whose telephone number is (703) 305-8009. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (703) 308-0538. The central official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2125

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Carlos Ortiz-Rodriguez
Patent Examiner
Art Unit 2125

A handwritten signature in cursive script, appearing to read "L. P. Picard".

cror

September 24, 2004

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100